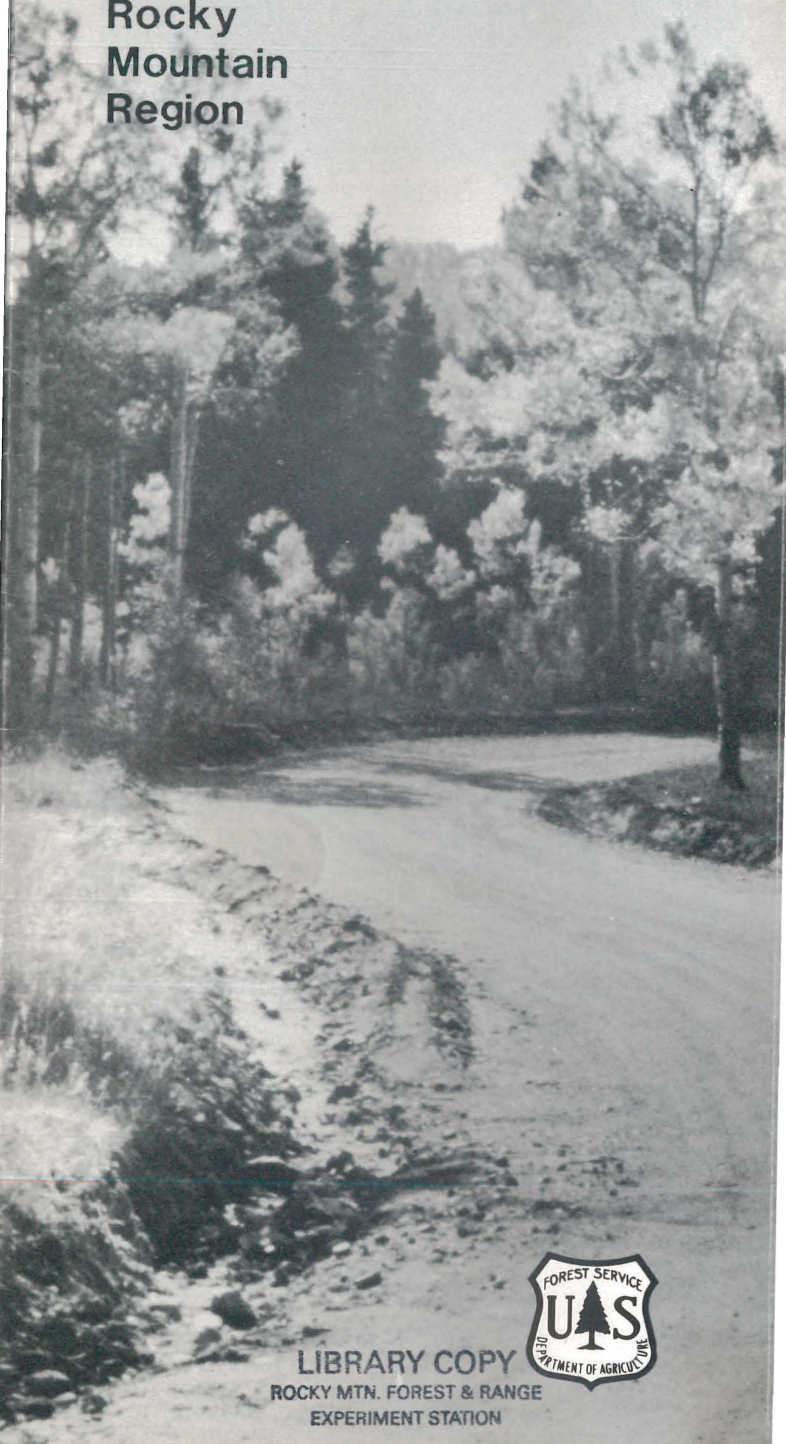


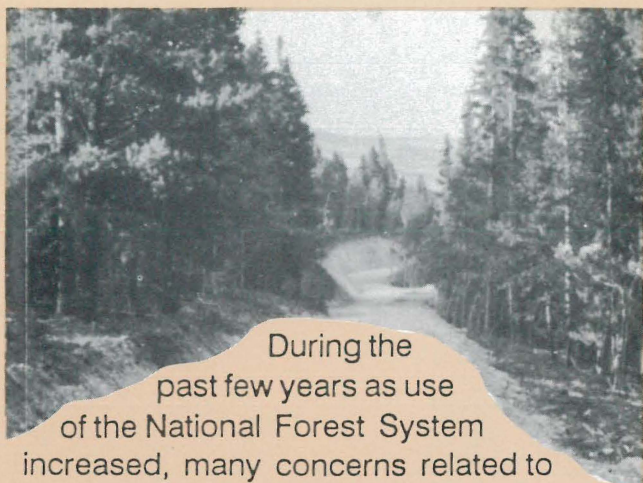
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ROADS

in the
Rocky
Mountain
Region



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ROCKY MTN. FOREST & RANGE
EXPERIMENT STATION



During the past few years as use of the National Forest System increased, many concerns related to road and travel management on the National Forests and Grasslands have surfaced. Questions include: Are new roads really needed? How many miles of road are needed? Where should roads be built? How much will the roads cost? How will roads affect wildlife? What about the environmental quality of the area the roads pass through? What kind of roads will be built? How will the roads be managed? Will the roads be open or closed to public use?

Roads and road management issues were addressed in the Forest Plans which were recently completed for all National Forests and Grasslands within the Rocky Mountain Region. These Forest Plans, along with the Regional Guide, contain the management direction necessary to integrate roads and road management with all National Forest land and resource management activities.

This brochure discusses roads and road management within the Rocky Mountain Region. It also addresses future road management based on the decisions in the Forest Plans.

ROADS IN THE PAST

A network of roads to move people and products through the National Forest System began evolving even before the Forest Service was created in 1905. Methods of travel changed as technology moved from the horse and wagon to modern gasoline and diesel powered vehicles. Over the years the road system serving the National Forest System expanded and improved.



Following World War II, the road network in many parts of the National Forest System grew significantly in response to the rapidly growing demand for wood and other forest products. During this period, most segments of the public generally favored the concept of increased access to the National Forests for hunting, fishing and recreation, as well as for use of Forest resources such as timber and forage. This was due in large part to public fascination with the automobile and the growing demand for goods and services from the National Forests.

Recently, attitudes and perceptions have changed. Increased demands for both commodities and amenities, including various forms of recreation, from the National Forest System focused attention on roads and created conflicts among many Forest users. These

users have a variety of opinions about the appropriate use of the National Forests and the role of roads in their management.

ROADS IN THE PRESENT



Without roads it is difficult or impossible to protect the forest from fire and insects, or remove products such as wood and minerals.

Most recreation users depend directly or indirectly on roads. For example, roads are used as a way to get to a favorite camping spot, trail



head, fishing hole, ski area, hunting or recreation area. Roads are used when driving for pleasure, 4-wheeling and viewing scenery. In the Rocky Mountain Region, over 72 percent of the outdoor recreation activities are directly dependent on roads.



Arterial roads provide service to large land area, usually from 3,000 to 10,000 acres. Often arterial roads are public highways.



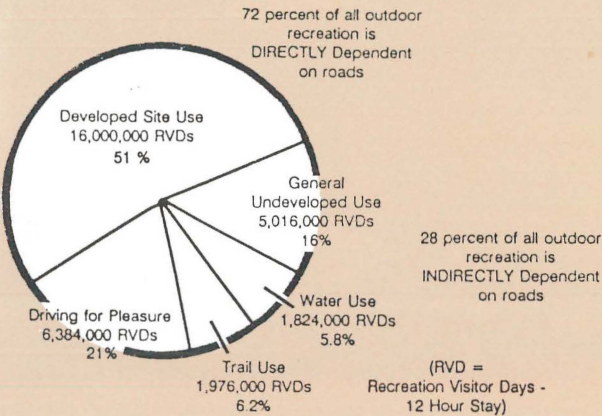
Collector Roads are intermediate links. They connect major, heavily traveled arterial routes and specific purpose local roads. A collector road usually serves several local, dead-end roads.



Local roads connect terminal facilities such as

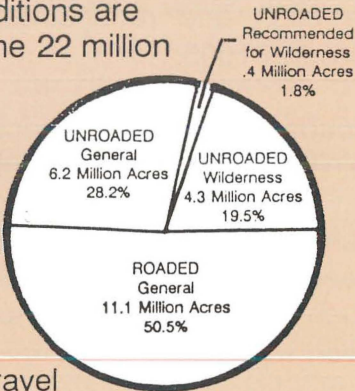
trailheads, recreation sites and log landings with forest collector or arterial roads or with public highways. These roads offer the greatest challenges to Forest Service managers.

RECREATION USE DEPENDENT ON ROADS WITHIN THE ROCKY MOUNTAIN REGION



ROADED/UNROADED LANDS IN THE ROCKY MOUNTAIN REGION

For most citizens, the perception of a road system is based on urban conditions. Forest and Grassland conditions are much different. Of the 22 million acres in the Rocky Mountain Region, approximately half, or 10.9 million acres, are totally unroaded; 4.3 million acres are wilderness where roads and vehicle travel are not allowed; 400,000 acres are recommended for wilderness as a result of Forest planning; and an additional 6.2 million acres



are undeveloped. The remaining 11.1 million acres of National Forest System lands containing roads have about two miles of road per square mile. For comparison, a city square mile may contain as many as 20 miles of streets.

The way a Forest or Grassland road will be managed is determined through the Forest planning process. Forest Plans are developed in cooperation with the public and provide for the protection, management and use of various resources. Among other things, Plans include direction for planning, building, using, and managing roads.

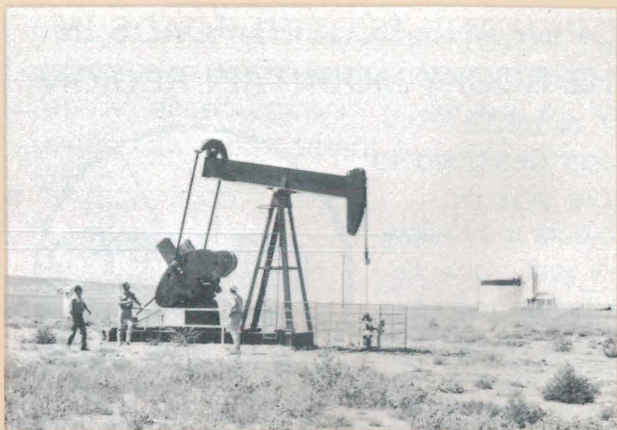
Although much of the public discussion has centered on the environmental effects of road construction, especially local roads, it is the actual use of the road rather than the road itself that has the greatest potential for conflict or resource damage.

For example, research done in south central Wyoming by the Rocky Mountain Forest and Range Experiment Station found that:

Elk are more tolerant of road use during certain seasons and that road management is extremely important to elk;

The people and traffic associated with roads have a more significant influence on elk security than most other factors combined; and

Road location and management can be used to increase effective use of available habitat by elk.



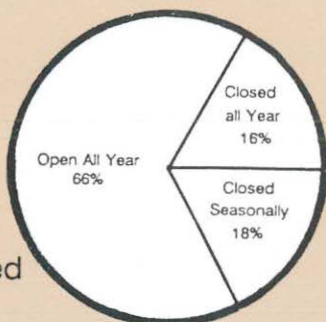
Local roads are often built for a specific purpose or project, such as accessing oil and gas drilling, tending a grazing allotment, reaching a trail head, getting to campgrounds and picnic grounds, harvesting timber, or maintaining dams and irrigation ditches. Often roads may be available for vehicle use only during fair weather or during specified time periods.



To protect the environment or specific resources, Forest Plans may direct that a road be closed to motor vehicle use for part or all of the year. In the Rocky Mountain Region about 2/3 of the roads are open year-round except when closed naturally by snow. Of the total miles, about 5,650 are closed all year and 6,000 miles closed seasonally.

OPEN AND CLOSED ROADS IN THE ROCKY MOUNTAIN REGION

For example, roads designed to serve specific projects may allow only traffic directly related to the project, while other roads may be closed part of the year to protect elk calving areas. Roads closed for all or part of the year and low traffic roads often provide:



Recreation opportunities and access for hiking, hunting, fishing, camping, snowmobiling, picnicking, cross-country skiing, nature walks, and bird watching.

Wildlife openings used for feeding and breeding. Browse plantings and vegetation treatments along the right-of-way can provide additional benefits. The increased "edge" effect (where two plant communities meet) contribute to diversity of habitat and animal species.

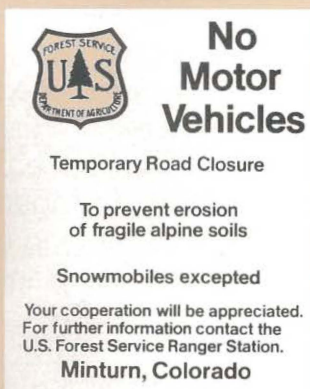
Drainage systems to control run-off and increase infiltration.

Access for individuals to gather firewood, Christmas trees, berries, mushrooms, and other forest products.

Access for protection from fire, disease and insect infestation.

It is important to the success of road closure programs that the reasons given for the closures are logical, understandable, and in the

interest of forest resources. Recent experience shows that road closures are being more readily accepted and observed by forest users. Law enforcement is a measure of last resort.



Local governments or counties often assume maintenance responsibilities for roads with high levels of local traffic not related to National Forest management. This is usually done by the Forest Service granting a right-of-way or easement which may also include an agreement to control traffic and manage the road-



way. About 6,000 miles of National Forest System roads in the Region are managed under these agreements.

Roads are obliterated when they no longer serve management or public needs. Road obliterations tend to recreate natural conditions and blend the reclaimed road corridor with the landscape. Between 40 and 60 miles of road are obliterated each year.



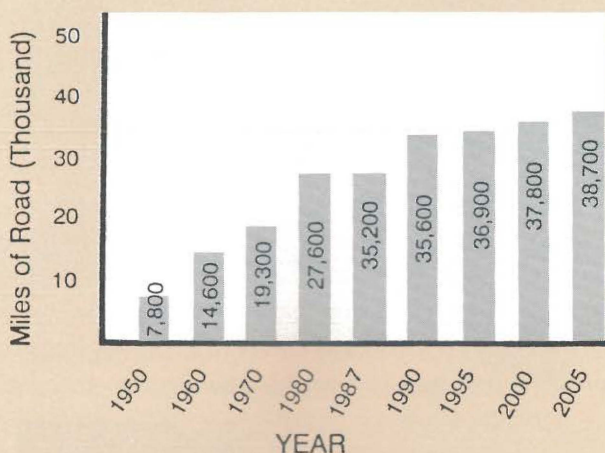
ROADS IN THE FUTURE

What does the future hold for the Rocky Mountain Region? Forest Plans discuss the role of roads in all phases of future forest management and project the level of road construction and reconstruction to be steady through 1995.

Roads are obviously necessary for logging, mining, water developments, and for developing and using recreation facilities such as campgrounds and ski areas. A less obvious need for roads is associated with activities such as backpacking, hunting, fishing, and even wilderness use.

Forest Plans show a substantial acreage of unroaded lands within the Region. This, along with the modest projections for future road

ROAD MILES IN THE ROCKY MOUNTAIN REGION



construction as illustrated in the graph, clearly shows that the Forest Service is not on a road building binge.

Options for effective road management will continue to be determined through the Forest planning process. The Plans require site specific environmental analyses before actual construction, reconstruction or other road related projects take place. This means that public participation and detailed analysis of environmental effects will be completed and will be the basis for making a decision on any proposed road-related projects. In addition, the requirements in the Forest Plans ensure that roads will be compatible with other uses and contribute to achieving other resource objectives.

Forest Plans also require annual monitoring and evaluation. These processes provide an opportunity for Forest managers to determine if the standards and guidelines in the Plan are being properly applied and if the goals and objectives are being achieved. Monitoring and evaluation helps the Forest Service identify



changes which may be needed to resolve conflicts among users or resources. The public can help by sharing their ideas and concerns about road management.

The Forest Service welcomes your interest and participation in managing the National Forest System. To become involved, please contact a Forest Service office near you.

NATIONAL FOREST SYSTEM ROADS IN THE ROCKY MOUNTAIN REGION

Type of Road	Miles in System	Percent of System	Traffic Volume/Speed	Lanes	Surface and Season of Use	Construction and Operation Costs
Arterial	4,700	13	High	usually two	all weather paved	high
Collector	6,500	19	Moderate	usually one	all weather gravel	moderate
Local	24,000	68	Low	one	seasonal dirt/gravel	low
Total	35,200	100				